ABSTRACT OF THE DISCLOSURE

A structural panel comprised of a composite preform having an electrically conductive stitching. The stitching forms an electrically conductive grid-like network on the structural panel to better dissipate electrical energy received in a lightning strike throughout at least a portion of the thickness of the composite preform. Advantageously, the electrically conductive stitching is applied to the composite preform during the primary manufacturing process, rather than in a subsequent manufacturing step, to thereby help reduce the overall manufacturing cost of the structural panel. In one alternative embodiment a non-conductive polymer stitching is also applied throughout the entire thickness of the composite preform.